DOCUMENT RESUME

ED 288 653 PS 017 016

AUTHOR Cummings, E. Mark; El-Sheikh, M.
TITLE An Organizational Scheme for the Classification of Attachments on a Continuum of Felt-Security.
PUB DATE Apr 86
NOTE 20p.; A previous version of this paper was presented at the International Conference on Infant Studies (Los Angeles, CA, April 1986). Document contains light, dot matrix print.
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Attachment Behavior; *Classification; Comparative Analysis; *Depression (Psychology); *Infants; *Mothers; *Security (Psychology); Toddlers
IDENTIFIERS *Assessment Instruments

ABSTRACT

A scheme for classifying attachment patterns is proposed that retains important elements of Ainsworth's system, but extends it to allow for the inclusion of more deviant patterns of behavior. The proposed scheme asserts that attachment relationships can be ordered on a continuum of felt security based upon an organizational interpretation of the security that the child derives from the relationship with the parent in the Strange Situation. Behaviors considered in the new classification are those of (1) amelioration; (2) avoidance; (3) resistance; (4) difficulty in comforting; (5) depressed affect; (6) disharmony; and (7) disconnectedness. This system and Ainsworth's were used to classify a sample of 2- and 3-year-old children (N=38) of depressed mothers of varying ages who were part of a larger study. Classification was based upon the immediate success of the child's efforts to use the parent as a secure base and a more general judgment of the security that the child derived from the parent. Comparison of results indicated that the new scheme allowed classification of "unclassifiable" patterns; permitted classification over a wide range of ages in early childhood; detected insecurity in behaviors not included in Ainsworth's system; increased discrimination within pattern classification categories; and reduced the potential error of measurement at the border between categories. A table shows the security ratings for 10 of the children studied. Fourteen references are listed. (RH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED288653

An Organizational Scheme for the Classification of Attachments on a Continuum of Felt-Security[1]

E. Mark Cummings and M. El-Sheikh

West Virginia University

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
E. Mark Cummings
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PS 017016

[1] A previous version of this paper was presented by E. Mark Cummings, D. Daniel, and M. El-Sheikh at the International Conference of Infant Studies, Los Angeles, April, 1986.

RUNNING HEAD: CONTINUUM OF SECURITY

BEST COPY AVAILABLE

ABSTRACT

A scheme for classifying attachment patterns is proposed that retains important elements of Ainsworth's system, but extends it to allow for the inclusion of more deviant patterns. This scheme prosposes that attachment relationships can be ordered on a continuum of felt-security based upon an organizational interpretation of the security that the child derives from the relationship with the parent in the Strange Situation. Classification is based upon an organizational interpretation of (a) the immediate success of the child's efforts to use the parent as a secure base, and (b) a more general judgement of the security that the child derives from the parent. This system and Ainsworth's system are used to classify a sample of children of depressed mothers of varying ages, and the results are compared.

An Organizational Scheme for the Classification of Attachments on a Continuum of Felt-Security

In attachment theory, it is believed that a primary function of attachment figures is to serve as a source of security for the infant in situations that induce fear or anxiety in the child. Consistent with this, Ainsworth's scheme (Ainsworth, Blehar, Waters, & Wall, 1978) for classifying infant-parent attachments reflects differences between children in the extent to which they are able to effectively derive security from the parent when faced with stress in the Strange Situation. Organizational patterns of children's use of the parent for security (Sroufe & Waters, 1977), rather than discrete behaviors, serve as the bases for classification, but children's behavior towards parents during reunions following two brief seperations is heavily emphasized. Children are classified as securely attached to parents if they actively seek contact with the parent during reunion (Group B). Children are classified as insecure if they do not effectively use the parent as a source of security during reunion, but avoid the parent (insecure-avoidant, Group A), or alternate contact seeking and resisting (insecure-ambivalent, Group C).

There is ample evidence to suggest that Ainsworth's classification system has both construct and predictive

validity (e.g., Ainsworth et al., 1978; Arend, Grove, & Sroufe, 1979; Pastor, 1981; Schneider-Rosen & Cicchetti, 1984; Sroufe, Fox, & Pancake, 1984). However, some difficulty in classification has been reported since the first applications of Ainsworth's system. In her doctoral thesis, Main force classified all attachments into A, B, or C groups, but she reports that informally she considered 3 infants to show an A and C pattern, that is, enough avoidance and ambivalence to justify classification in either or both groups (1973, reported in Main & Solomon, 1985). Sroufe and Waters (1977) reported that 10% of their infants were not easily classifiable, but decided upon a force classification strategy, and did not specify the characteristics of unclassifiable patterns. Difficulty in classification was found even in Ainsworth's criterion sample when 12 month old infants and their mothers returned to participate in a second Strange Situation two weeks after the first (reported in Ainsworth et al., 1978). Many of the infants scored as insecure in their first Strange Situation were force classified as secure on the basis of their second Strange Situation, but there were reservations about the validity of these classifications (see Main & Solomon, 1985), as well as questions about the appropriateness of repeating Strange Situation tests so close together in time.

The first systematic report of unclassifiable patterns was by Main and Weston (1981). They assigned infants to an

"unclassifiable" category based upon the occurrence of any one of the following patterns: "behaves to the parent in reunion as a secure infant, but behaves identically to the stranger", "extreme avoidance is combined with extreme distress throughout the session", "behaves in one reunion as a secure infant but in the other as an insecure infant", "physical behavior is that of a secure infant- approach, clinging- but infant is affectless with signs of depression". Consistent with the notion that these infants should be regarded as insecure, unclassifiable infants behaved more like insecure than secure infants in terms of conflict behavior, defined as behaviors that had a "disordered, purposeless, or odd appearance", and in terms of lack of relateness to an adult stranger. The fact that 13 of 19 unclassifiable infants would be force classified as secure suggests that the unclassifiable category distinguished additional meaningful differences in attachment patternings.

Crittenden (1984) explored alternative classifications among children of abusing and neglecting mothers. She reexamined classification according to the A, B, C system when children of abusing/neglecting mothers who had behaved "very unusually" in the Strange Situation were force classified as secure. This resulted in the development of an avoidant and ambivalent (A/C) category characterized by (a) moderate to high avoidance, (b) moderate to high

resistance, and (c) moderate to high proximity seeking. A/C infants were also significantly more likely than children in other classifications to show unusual or odd behaviors in the Strange Situation such as "face covering, huddling on the floor and rocking, and wetting". This pattern was only observed among children of abusing and neglecting mothers, and never found among children of adequate mothers. In a second study, the A/C pattern was related to the severity of maternal maltreatment, with the highest incidence found when there was both abuse and neglect.

Radke-Yarrow, Cummings, Kuczynski, and Chapman (1985) studied patterns of attachment in another at-risk group, children of bipolar and unipolar depressed mothers. Children were classified according to A, B, C criteria, but a sizeable proportion of the children received high scores on both avoidance and ambivalence in the Strange Situation. Instead of being force classified as A or C, they were treated as a separate A/C group. Other unclassifiable behaviors typifying children in this group included sadness, depression, and odd vocalizations, body postures and movements. Only children of mothers with major unipolar or bipolar depression showed this pattern; it was never found in children of normal mothers or mothers with minor depression. It was linked not only with the occurrence of maternal depression, but with the severity of her depression: (a) the percent of the child's lifetime in which

the mother was depressed, (b) ratings of the severity of her most severe depressive episode, and (c) the number of different forms of treatment she had received for depression. In addition, if mothers with a major affective disorder were without a husband in the household, risk of A/C classification was increased.

Main and Solomon (1985) proposed a new classification scheme based upon recent findings from the Berkely longitudinal study (this updates the work reported in Main & Weston). An assumption of this classification scheme was that alternative patterns of attachment essentially represent disorganizations of A, B, C patterns, termed as insecure-disorganized/disoriented (D). Multiple criteria qualified infants for the D category, including (a) direct indices of depression, (b) out-of-context behaviors or indices of confusion or apprehension, (c) A/C patterns, (d) "dazed" behavior or aimlessness, and (e) any other violations of A, B, C patterns. Three instances of "detachment" (in a sample of 268) that is, no evidence of an attachment bond, were also reported.

Suggestive of the validity of D classification, prediction of six-year functioning was greatly improved by treating D infants as a seperate group. Infants classified as D were more likely to have insecure-controlling attachments, that is, organizations of relationships with parents that were controlling and parental, at six years of

age (see also Main, Kaplan, & Cassidy, in press). There were also differences in terms of parents experiences. Parents of D infants were more likely to have themselves suffered a loss of a parent prior to maturity.

There is thus accumulating evidence for the occurrence and validity of patterns of attachment other than A, B, and C. Reoccuring criteria include: (a) odd, unexpected behaviors, and (b) sad, depressed behavior, (c) disorganized or disconnected behaviors. In many respects, these patterns appear very insecure, that is, more at risk than A or C patterns. However, there is no consensus on the best system for describing deviant patterns. The A/C pattern is not inclusive enough, since other often associated problem behaviors, e.g., depression or disorganization, are ignored in classification. The D pattern may be overly inclusive, and subsume multiple patterns better viewed as distinct.

<u>A Proposed Scheme for Classifying a Continuum of Patterns of Attachment</u>

This scheme proposes that all attachment relationships can be ordered on a continuum of secure-insecure-detached based upon an organizational interpretation of children's derived security in the Strange Situation. A larger array of responses in seen as relevant to classification even in infancy than is included in the A, B, C classification system. It is posited that the A, B, C system reflects secure to moderately insecure attachment patterns but that

more extreme deviations of attachment patternings occur and can be indexed by the inclusion of other behavioral signs. It is also assumed that by extending criteria patterns of attachment can be classified beyond infancy.

Attachments are classified on a scale ranging from secure to detached based upon (a) the relative occurence versus absence of behaviors indicative of successful versus unsuccessful immediate efforts on the child's part to derive security from the parents, and (b) the relative felt-security of the child evident in general functioning, which is assumed to indirectly reflect the security derived from the attachment relationship. Five anchor points are distinguished: secure (1.0), insecure (2.0), very insecure (3.0), and not attached (4.0). Four classes of behavior are seen as relevant to judgements of the immediate effectiveness of the parent as a secure base: (1) Ameliorative. Responses indicative of efforts on the child's part to derive security from the parent. These include proximity seeking, contact maintaining , and distance interaction. A smoothly operating system of ameliorative bids by the child and satisfactory responses by the parent is assumed to reflect successful functioning of the attachment relationship. (2) Avoidant. Any expression of avoidance, including gaze-aversion, failure to respond to parent's overtures, ignoring of the parent, or postural aversion. Avoidance when the child is stressed reflects an

inability of the child to rely upon the parent as a source of felt-security (Main, 1981). (3) Resistant. Direct expressions of anger or rejection to parents, including rejection or struggle against physical contact, or more diffuse expressions of resistance such as temper tantrums, or crankiness. Resistance is seen as an alternative form of expression of mistrust and anger towards the parent around issues of felt-security. (4) Difficulty comforting. The difficulty that the child has in maintaining or regaining smooth emotional, social, and exploratory functioning in the parent's presence, as indexed by the intensity or frequency of distress or depressive responses or the latency until they end. This response demonstrates that the child is unable to derive adequate security from the parent. These behaviors are viewed as relevant to classification whenever they occur, but are most relevant when they occur in situations in which the attachment system is likely to be highly activated, i.e., reunion.

Three classes of behavior are seen as demonstrating a more general failure of the attachment relationship to provide felt-security, reflected in problems in emotional, social, and exploratory functioning. These behaviors are (1) Disharmony. Behaviors indicative of generally disrupted or disregulated functioning, such as odd cries, asynchrony of affect or movement, strange or sudden movements. These responses are seen as reflecting behavioral disorganizations

resulting from the intrusion of anxiety or fear. (2) Depression. Persistent flat affect, sadness, extreme hypoactivity, unresponsiveness, depressed body posture. In this instance inadequate felt-security results in significant affective dysfunction. (3) Disconnected. Responses that suggest the child is lost, aimless, dazed, in short, functioning as if he or she has no secure base.

Several assumptions are made: (a) Responses reflecting the pervasive impact of low felt-security, e.g., depression, reflect greater insecurity than problems in the immediate use of the parent as a secure base, e.g., resistance, (b) functional problems are less worrisome than problems localized in one or several periods, and (d) felt-security can be measured throughout early childhood, although the mode of expression may change with age.

METHOD

Subjects

Families were participants in a longitudinal study of the development of offspring of depressed parents conducted at the Laboratory of Developmental Psychology (NIMH) (Radke-Yarrow, Cummings, Kuczynski, & Chapman, 1985). The sample consisted of children of bipolar depressed mothers or mothers with major unipolar depression. For the present purposes, this sample has the advantage of being likely to

test the full range of a continuum of felt-security. Subjects were two or three years old when seen.

Procedure

Children and their mothers were seen in a modified version of the Strange Situation (Ainsworth et al., 1978). Attachments were classified in terms of Ainsworth's pattern system (which is described in Ainsworth et al., 1978). and in terms of ratings on a security continuum.

The behaviors considered in classification are: (1) ameliorative; (2) avoidance; (3) resistance; (4) difficulty comforting; (5) depressed affect; (6) disharmony; and (7) disconnectedness. Classification was based upon (a) the immediate success of the child's efforts to use the parent as a secure base (indexed by ameliorative behavior, avoidance, resistance, and difficulty comforting); and (b) a more general judgement of the security that the child derives from the parent. Classes of behavior assumed to reflect a more general failure of the attachment relationship to provide felt-security included disharmony, depression, and disconnectedness.

These behaviors were weighed differently in classification because of their different implications regarding children's felt-security. General rules were: (a) responses reflecting the pervasive impact of low felt-security, e.g., depression, reflected greater

insecurity than problems in the immediate use of the parent as a secure base; (b) functional problems were less worrisome than an absence of functioning; and (c) problematic functioning throughout the Strange Situation was more worrisome than problems localized in one or several periods.

Attachments were ordered on a dimension from very secure at one extreme, representing optimal functioning of the attachment system in the provision of security, to detached at the other extreme, reflecting the absence of derived security. Endpoints of the scale were defined as very secure (1.0) and not attached (4.0), with regions in between designated as secure (1.0 - 1.9), insecure (2.0-2.9), and very insecure (3.0-3.9). Correspondence between relative felt-security and points on the scale are shown in Table 1. Conceptual and methodological issues surrounding the use of this system are described in greater detail in Cummings (in press).

RESULTS

To illustrate this system, the classification of 10 cases on Ainsworth's pattern classification system and in terms of a continuum of felt-security is shown in Table 2 (a total of 38 cases were classified). These results demonstrate the process of integrating multiple and new sources of information in making classification decisions

across a wide range of ages in early childhood. Interrater reliability for ratings was r= .86%. Secure (B) pattern children received ratings between 1.0 and 3.1 (X= 1.51) and insecure-avoidant (pattern A) and insecure-ambivalent (pattern C) children received ratings between 2.0 and 3.7 (X= 2.75). Classification on a security continuum thus (a) allowed for the classification of "unclassifiable" patterns, (b) allowed for classification across a wide range of ages in early childhood, (c) detected insecurity shown by behaviors not included in Ainsworth's system, (d) increased discrimination within pattern classification categories, and (e) reduced the potential error of measurement at the boarder between categories.

CONCLUSION

This report demonstrates the feasibility of scoring attachments on a security continuum in early childhood. As a supplement to pattern classification, classification on a continuum of felt-security has many advantages. Such a system also has the potential to provide conceptual basis for comparing attachments across contexts, ages, and classes of relationships; instances in which patterns of behavior may be highly variable and difficult to compare. Cummings (in press) has speculated with regard to these potential applications.

References

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). Patterns of attachment: A psychological study of the strange situation. Hillside, NJ: Erlbaum Associates.

Arend, R., Grove, F., & Sroufe, L. A. (1979). Continuity of individual adaptation from infancy to kindergarten. A predictive study of ego-resiliency and curiosity in preschoolers. Child Development, 50 950-959.

Crittenden, P. M. (1983 ?4). Maltreated Infants: Vulnarability and resilience. Paper presented at the meeting of the Society for Research in Child Development, Detroit.

Cummings, E. M. (in press). Classification of attachment on a continuum of felt security: Illustration from the the study of children of depressed parents. To appear in M. Greenberg, D. Cicchetti, and E. M. Cummings (Eds.) Attachment in the Preschool Years.

Main, M., & Hesse, E. (in press). Insecure-disorganized/ disoriented attachment status: Theory and correlates. To appear in M. Greenberg, D. Cicchetti, and E. M. Cummings (Eds.) Attachment in Preschool Years.

Main, M., Kaplan, N., & Cassidy, J. (in press). Security in infancy, childhood, and adulthood: A move to the level of representation. In I. Bretherton and E. Waters (Eds.). Growing points in attachment theory

and research. Society for Research in Child Development Monograph Series.

Main, M., & Solomon, J. (1985). Discovery of an insecure-disorganized attachment pattern: Procedures, findings, and implications for the classification of behavior. Unpublished manuscript.

Main, M., & Weston, D. (1981). The quality of the toddlers' relationship to mother and to father: Related to contact behavior and the readiness to establish new relationships. Child Development, 52, 932-940.

Pastor, D. (1981). The quality of mother-infant attachment and its relationship to toddlers initial sociability with peers. Developmental Psychology, 17, 326-335.

Radke-Yarrow, M., Cummings, E. M., Kuczynski, L., & Chapman, M. (1985). Patterns of attachment in two- and three-year olds in normal families and families with parental depression. Child Development, 56, 884-893.

Schneider-Rosen, K., & Cicchetti, D. (1984). The relationships between affect and cognition in maltreated infants: Quality of attachment and the development of self recognition. Child Development, 55, 648-658.

Spieker, S. J., & Booth, C. L. (1985). Family risk typologies and patterns of insecure attachment. In J. D. Osofsky (Chair), Intervention with infants at risk: Patterns of Attachment. Symposium conducted

at the meeting of the Society for Research on Child Development, Toronto.

Sroufe, L. A., Fox, N. E., & Pancake, V. R. (1983). Attachment and dependency in developmental perspective. Child Development, 54, 1615-1627.

Sroufe, L. A., & Waters, E. (1977). Attachment as an organizational construct. Child Development, 48, 1184-1199.

Table 1

Relationships between Felt-Security and Points on the Continuum

Rating	Security
1.0-1.4	Very Secure. Judgments are made about the extent of positive characteristics of attachment, e.g., the extent of the parents' reciprocity to the child's bids.
1.5-1.9	Secure. There is slight evidence of insecurity.
2.0-2.4	Insecure. There are moderate, but delimited, signs of insecurity.
2.5-2.9	There are strong, but delimited signs of insecurity.
3.0-3.4	Very Insecure. There are moderate, and general, signs of insecurity.
3.5-4.0	Not Attached. There are strong, and general signs of insecurity.

Table 2

Security-Related Behaviors, Forced Classifications of Attachment Patterns and Security Ratings in Children of Depressed Parents

SS #	Sec.-Rel. Beh.[a] 1[b]	2	3	4	5	6	7	Forced Class.	Ratings of Security
1	H	L	L	L	L	L	L	B	1.0
2	H	M	L	L	L	L	L	B	1.5
3	M	M	L	L	M	L	L	A	2.0
4	M	H	L	L	L	L	L	A	2.5
5	L	H	M	L	L	L	L	A	2.5
6	M	H	M	H	L	M	L	A	3.0
7	M	M	H	H	M	L	L	C	3.0
8	L	H	H	H	L	L	L	A	3.3
9	L	H	L	H	M	H	M	A	3.5
10	M	M	M	H	M	H	L	A	3.7

[a] H=high; M=medium; L=low.

[b] 1=ameliorative; 2=avoidance; 3=resistance; 4=difficulty comforting; 5=disharmony; 6=depressed affect; 7=disconnectedness.